

REMARKS

Claims 1-7, 10, 12, 14, and 16-34 are pending. Claims 1-5, 7, 10, 14, 16-18, and 32-34 have been withdrawn from consideration. Claims 6, 12, and 19-31 were rejected under 35 U.S.C. § 112, first paragraph. Applicants address these rejections as follows.

Objections to the Drawings

Applicants replace current Figures 1-17 with formal Figures 1-17 that have been amended to address the draftsman's objections set forth on the Form PTO-948 included with the Office Action mailed on May 21, 2002. No new matter has been added by this amendment.

Claim Amendments

Applicants have cancelled claims 12 and 19-31, amended claim 6, and have added new claims 35-67. Claim 6 has been amended to specify an isolated grapevine leafroll virus RNA molecule encoding a protein or peptide including the amino acid sequence of SEQ ID NO:5. New claim 35 finds support, for example, at page 7, lines 23-28, of the specification. Support for claims 36-41 and 48-51 may be found, for example, at page 19, line 19, to page 20, line 1, and in Example 1 beginning at page 20, line 16 of the specification. Support for claims 42-47 and 52-54 may be found, for example, at page 19, lines 19-28, and in Example 1 beginning at page 20, line 16 of the specification. New claims 55-67 find support in original claims 19-31. New claim 65 also finds support in

the specification, for example, at page 8, line 30, to page 9, line 10.

Rejections under 35 U.S.C. § 112, first paragraph

Claims 6, 12, and 19-31 were rejected under 35 U.S.C. § 112, first paragraph, on the basis that the disclosure in Applicants' specification (1) fails to provide a written description of the claimed invention and (2) is not commensurate in scope with the claimed invention. For the following reasons, each of these rejections may be withdrawn.

Written Description

Claims 6, 12, and 19-31 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors, at the time the application was filed, had possession of the claimed invention. In particular, the Examiner asserts (page 5): "Given that Applicant has disclosed the sequence of a single grapevine leafroll virus type 3 proteinase, one skilled in the art would not recognize Applicant was in possession of every grapevine leafroll type 3 gene encoding a proteinase."

To address the rejection of claim 6, Applicants have amended this claim to indicate that the isolated grapevine leafroll virus RNA molecule encodes a protein or polypeptide including the amino acid sequence of SEQ ID NO:5. Applicants submit that their specification provides adequate written description of the nucleic acid molecules as now claimed; with the specification's description, at page 7, lines 23-26, of "the

proteinase domain ha[ving] an amino acid sequence comprising SEQ ID NO:5, as given in Figure 6,” the specification vis-à-vis the claims is in compliance with the written description requirement set forth in the M.P.E.P. at § 2163 and in the Office’s Written Description Guidelines (“Guidelines”) found at <http://www.uspto.gov/web/menu/written.pdf> (see, for example, Example 8 and the accompanying analysis). Withdrawal of this rejection is requested.

Similarly, Applicants note that their specification describes the subject matter of new claim 35, which is directed to an isolated grapevine leafroll virus DNA molecule encodes a protein or polypeptide including the amino acid sequence of SEQ ID NO:5.

In addition, Applicants point out that their specification provides an adequate written description of the nucleic acid molecules (and plants, vectors, and host cells including these molecules) encompassed by newly added claims 36-67, which require high stringency hybridization conditions. The scope of the claims is now limited to sequences that are highly homologous, and therefore necessarily structurally similar, to the disclosed SEQ ID NO:4. Furthermore, the specification vis-à-vis the claims is in compliance with the Guidelines. (See, for example, Example 10 and the accompanying analysis in the Guidelines). Withdrawal of this rejection is requested.

Enablement

Claims 6, 12, and 19-31 also were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is not described in the specification in such a way as to

enable one skilled in the art to which it pertains to make and use the invention. In essence, the Examiner asserts that the Applicants fail to provide specific guidance for isolation of other structurally and functionally related nucleic acid molecules as claimed. In light of the amendment made to claim 6 and with the recitation of specific hybridization conditions in the newly added claims, no undue trial and error experimentation would be required to identify nucleic acid molecules encompassed by the pending claims. Accordingly, this rejection may be withdrawn.

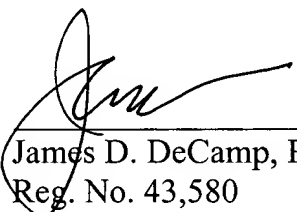
CONCLUSION

Applicants submit that the application is now in condition for allowance and such action is respectfully requested.

Enclosed are a "marked-up" version of the amended claims and a clean version of all pending claims. If there are any charges or any credits, please apply them to Deposit Account No. 03-2095.

Respectfully submitted,

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